

Turbidity by Nephelometric Method**SM 2130 B - 2001 (2011)**

ADDITIONAL QC REQUIREMENTS FOR THIS METHOD: *Certified or Accredited laboratories using this method are assessed to applicable requirements of SM 1020 and SM 2020.*

Facility Name: _____ VELAP ID: _____

Assessor Name: _____ Analyst Name: _____ Inspection Date: _____

Records Examined: SOP Number/ Revision/ Date: _____ Analyst: _____

Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
1. Is turbidity determined as soon as possible without altering original sample conditions such as temperature or pH?	2130 A.3				
2. If sample cannot be analyzed immediately, is it cooled to 4° C to minimize microbiological decomposition of solids?	2130 A.3				
3. Is the nephelometer capable of detecting differences of 0.02 NTU in waters having turbidity less than 1 NTU?	2130 B.2.a				
4. Are sample cells clean and free of scratches or etching?	2130B.2.b				
5. Are sample cells never handled where the light strikes them?	2130B.2.b				
6. Is dilution water prepared by filtering laboratory reagent water through a filter sufficiently small to remove particles >0.1 µm, or is low-turbidity commercially bottled water used?	2130B.3.a				
7. Is turbidity of bottled dilution water checked to verify that it is lower than the level that can be achieved by the laboratory?	2130B.3.a				
8. Are laboratory-prepared Formazin solutions or commercially available standards used for calibration?	2130B.3.d				
9. Are laboratory-prepared stock formazine suspensions held no longer than 1 year?	2130B.3.b.3				
10. Are working standards prepared immediately prior to use and discarded after use?	2130B.3.c				
11. Is the instrument calibrated according to the manufacturer's instructions?	2130B.4.b				
12. Are sample cells filled with standards and samples that have been gently agitated, and sufficient allowed time allowed for air bubbles to escape?	2130B.4.c				<i>When possible, are samples degassed prior to measurement?</i>
13. Are samples reported as follows: <div style="display: flex; justify-content: space-between;"> <div>Range</div> <div>To Nearest</div> </div> <div style="display: flex; justify-content: space-between;"> <div>0 - 1.0</div> <div>0.05 NTU</div> </div> <div style="display: flex; justify-content: space-between;"> <div>1 - 10</div> <div>0.1 NTU</div> </div> <div style="display: flex; justify-content: space-between;"> <div>10 - 40</div> <div>1 NTU</div> </div> <div style="display: flex; justify-content: space-between;"> <div>40 - 100</div> <div>5 NTU</div> </div> <div style="display: flex; justify-content: space-between;"> <div>100 - 400</div> <div>10 NTU</div> </div> <div style="display: flex; justify-content: space-between;"> <div>400 - 1000</div> <div>50 NTU</div> </div> <div style="display: flex; justify-content: space-between;"> <div>>1000</div> <div>100 NTU</div> </div>	2130B.5				

Notes/Comments